

OUTCOME

CLAVE seeks to provide new insights with regard to scientific and practical climate change adaptation options.

(1)

An enhanced analytical concept of climate change response options:

- A set of operable vulnerability and fragmentation indicators, representative for Latin American megacities.
- A methodological approach for measuring urban vulnerability at the local level.
- A proposal for climate change adaptation options at the local level.

(2)

As an important practical product, a guideline for municipalities to apply adaptation options at the local level will be developed.

TEAM & CONTACT

The CLAVE research group is a cooperation of scientists from the Helmholtz Centre for Environmental Research GmbH - UFZ and the Pontificia Universidad Católica de Chile (PUC).

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CLAVE

German-Chilean International Research Group
2013-2016

 Climate change adaptation options in
Santiago de Chile and other Latin American
megacities - Urban vulnerability on a local level





ABOUT

CLAVE is a German-Chilean 'International Research Group' that aims at gaining further insights into the vulnerabilities of individuals and municipalities in Latin American megacities. The focus is on vulnerability to two selected hazards: flood and heat. As it is expected that continuous urbanization and climate change are going to aggravate the impacts of these hazards, the project aims to analyse

the exposure, susceptibility and coping capacities of individuals and communities, as well as the adaptive capacities of municipalities. By combining a vulnerability assessment with an analysis of urban fragmentation patterns, the project expects to achieve a clearer picture of the urban dimensions of vulnerability. Such in-depth analyses will lead to the development of context-specific adaptation options.

APPROACH

CLAVE research builds on two main concepts: urban fragmentation and urban vulnerability. It attempts to bring both concepts together in order to identify hot-spot areas that are fragmented and likewise affected by heat and flood hazards.

This allows for identifying context-specific problems and needs and will result in the development of appropriate response measures. This applied urban vulnerability model will be tested with regard to its transferability to other megacities. The in-depth qualitative and quantitative analysis is based on a set of urban fragmentation and urban vulnerability indicators, including data collected from household surveys, expert interviews, workshops, census- and GIS-data analyses, among others.

CASE STUDIES

Most of the research will be carried out in Santiago de Chile, although other cities in Latin America (e.g. Buenos Aires, Bogotá and Lima) are also potential case studies, depending on data availability and concept transferability. In-depth analyses will be undertaken in selected municipalities within the Metropolitan Area of Santiago de Chile.